VULEV, V.; NEDELCHEV, St.; MANDZHAKOV, St.; MISHEV, Dim.

Electrotensiometric device for taking down the index diagrams of the high-speed internal-combustion engines. Godishnik mash elekt 9 no.3:95-107 '61. (publ. '62)

GANEV, P.; PARASKOV, Tsv.; MANDZHUKOV, St.; BINEV, As.

Vibrations of the 732-type electric truck during its motion with and without rubber springs. Godishnik mash elekt 12 no. 1:69-80 '62 [publ. '63].

GANEV, P.; NEDELCHEV, S.; MANDZHAKOV, S.; BINEV, As.

The ETV-3-MN electrotensiometric transducer for computing the pressure in blood vessels and cardiac cavities. Godishnik mash elekt 12 no. 1:137-152 '62 [publ. '63].

BAAZOV, N.G.; MANDZHAVIDZE, A.G.

Method for measuring the degree of polarization of a neutron beam.
Atom. energ. 13 no.4:365-366 O '62. (MIRA 15:9)
(Neutrons—Measurement)

BAAZOV, N.G.; MANDZHAVIDZE, A.G.

Production of highly polarized neutrons. Trudy Inst. fiz. AN Gruz. SSR 9:191-199 '63. (MIRA 17:7)

MANDZHAVIDZE, D.V.

Teratism of the Oriental spruce. Soob.AN Gruz.SSR 8 no.6:419-425 '47. (MIRA 9:7)

1.Akademiya nauk Gruzinskoy SSR, Tbilisskiy botanicheskiy sad. Predstavleno deystvitel'nym chlenom Akademii V.Z.Gulisashvili.
(Spruce)

MANDZHAVIDZE, D. V.

Mandzhavidze, D. V. "Ordinary or European fir Picea excelsa Link. in the Georgian climate," Vestnik Tbilis. botan. sada, Issue 57, 1948, p. 211-21 - In Georgian and Russian languages - Bibliog: 5 items

SO: U-3264, 10 April 1 53, (Letopis 'Zhurnal 'nykh Statey, No.3, 1949)

MANDZHAVIDZYE, D. V.

30235

Opyt akklimatizatsii roda risyea v Tbilisskom botanichyeskom sadu. Byullyetyen' Glav. botan. sada, vyp. 3, 1949, s. 51-53

SO: LETOPIS' NO. 34

NAZAREVSKIY, S.I.; MAKAROV, S.N.; PILIPENKO, F.S.; GERASIMOV, M.V.; IL'INSKAYA, M.L.; VEKSLER, A.I.,[deceased]; VASIL'YEV, I.M.; IL'INA, N.V.; SOKOLOV, S.Ya.; LOZINA-LOZINSKAYA, A.S.; SAAKOV, S.G.; ZALESSKIY, D.M.; AVRORIN, N.A.; IVANOV, M.I.; PRIKLADOV, N.V.; SOBOLEVSKAYA, K.A.; SALAMATOV, M.N.; MALINOVSKIY, P.I.; LUCHNIK, A.I.; KRAVCHENKO, O.A.; VEKHOV, N.K.; GROZDOV, B.V.; MASHKIN, S.; BOSSE, G.G.; PALIN, P.S.,(g. Shuya, Ivanovskoy oblasti); MATUKHIN; ZATVARNITSKIY, G.F.; GRACHEV, N.G.; CHERKASOV, M.I.; KIRKOPULO, Ye.N.; LEVITSKAYA, A.M.; GRISHKO, N.N.; LIKHVAR', D.F. VIL'CHINSKIY, N.M.; LYPA, A.L.; OREKHOV, M.V.; SHCHERBINA, A.A.; TSYGANKOVA, V.Z.; BARANOVSKIY, A.L.; GEORGIYEVSKIY, S.D.; STEPUNIN, G.A. OZOLIN, E.P.; LUKAYTENE, M.K.; KOS, Yu.I.; VAIL'YEV, A.V.; RUKHADZE, P.Ye.; VASHADZE, V.N.; SHANIDZE, V.M.; MANDZHAVIDZE, D.V.; KORKESHKO, A.L.; KOLESNIKOV, A.I.,(g. Sochi); SERGEYEV, L.I.; VOLOSHIN, M.P.; RYBIN, V.A.; IVANOVA, B.I.; RYABOVA, T.I.; GAREYEV, E.Z.; RUSANOV, F.N.; BOCHANTSEVA, Z.P.; BLINOVSKIY, K.V.; KLYSHEV, L.K.; MUSHEGYAN, A.M.; LEONOV, L.M.

Talks given by participants in the meeting. Biul.Glav.bot.sada no.15: 85-182 '53. (MLRA 9:1)

1. Glavnyy botanicheskiy sad Akademii nauk SSSR (for Makarov, Pilipenko, Gerasimov, Il'inskaya, Veksler); 2. Akademiya komunal'nogo khozyaystva imeni K.D. Pamfilova for Vasil'yev); 3. Vsesoyuznaya sel'skokhozyaystvennaya vystavka (for Il'ina); 4. Botanicheskiy sad Botanicheskogo instituta imeni V.L.Komarova Akademii nauk SSSR (for Sokolov, Lozina-Lozinskaya, Saakov); 5. Botanicheskiy sad Leningradskogo

(continued on next card)

NAZAREVSKIY, S.L.---(continued) Card 2.

gosudarstvennogo ordena Lenina universiteta (for Zalesskiy); 6. Polyarno-Al'piyskiy botanicheskiy sad Kol'skogo filiala imeni S.M. Kirova Akademii nauk SSSR (for Avrorin); 7. Botanicheskiy sak pri Tomskom gosudarstvennom universiteta (for Ivanov); 8. Botanicheskiy sad pri Tomskom gosudarstvennom universiteta imeni V.V. Kuybysheva (for Prikladov); 9. TSentral'nyy Sibirskiy botanicheskiy sad Zapadno-Sibirskogo filiala Akademii nauk SSSR (for Salamatov, Sobolevskaya); 10. Botanicheskiy sad Irkutsko gosudarstvennogo universiteta imeni A.A. Zhdanova (for Malinovskiy); 11. Altayskaya plodovo-yagodnaya opytnaya stantsiya (for Luchnik); 12. Bashkirskiy botanicheskiy sad (for Kravchenko); 13. Lesostepnaya selektsionnaya opytnaya stantsiya dekorativnykh kul'tur tresta Goszelenkhoz Ministerstva kommunal'nogo khozyaystva RSFSR (for Vekhov); 14. Bryanskiy lesokhozyaystvennyy institut (for Grozdov); 15. Botanicheskiy sad pri Voronezhskom gosudarstvennom universitete (for Mashkin); 16. Orekhovo-Zuyevskiy pedagogicheskiy institut (for Bosse); 17. Botanicheskiy sad pri Rostovskom gosudarstvennom universitete imeni V.M. Molotova (for Matukhin); 18. Botanicheskiy sad Kuybyshevskogo gorodckogo otdela narodnogo obrazovaniya (for Zatvarnitskiy); 19. Zoobotanicheskiy sad pri Kazanskom universitete (for Grachev); 20. Gosudarstvennyy respublikanskiy proektnyy institut "Giprokommunstroy" (for Cherkasov); 21. Botanicheskiy sad Odesskogo gosudarstvennogo universiteta imeni I.I. Mechnikova (for Kirkopulo); 22. Botanicheskiy sad pri Dnepropetrovskom gosudarstvennom universitete (for Levitskaya); 23. Botanicheskiy sad

(continued on next card)

NAZAREVSKIY, S.L.---(continued) Card 3.

Akademii nauk USSR (for Grishko, Likhvar', Vil'chinskiy); 24. Kiyevskiy sel'skokhozyaystvennyy institut (for Lypa); 25. Botanicheskiy sad Chernovitskogo gosudarstvennogo universiteta (for Orekhov); 26. Botanicheskiy sad pri L'vovskom gosudarstvennom universitete imeni Iv. Franko (for Shcherbina); 27. Botanicheskiy sad Khar'kovskogo gosudarstvennogo universiteta imeni A.M. Gor'kogo (for TSygankova); 28. Botanicheskiy sad Zhitomirskogo sel'skokhozyaystvennogo instituta (for Baranovskiy); 29. Botanicheskiy sad Akademii nauk Belorusskoy SSR (for Georgiyevskiy); 30. Institut biologii Akademii nauk Belorusskoy SSR (for Stepunin); 31. Botanicheskiy sad Akademii Litovskoy SSR (for Lukaytene); 32. Botanicheskiy sad Latviyskogo gosudarstvennogo universiteta (for Ozolin); 33. Kabardinskiy krayevedcheskiy botanicheskiy sad (for Kos); 34. Sukhumskiy botanicheskiy sad Akademii nauk Gruzinskoy SSR (for Vasil'yev, Rukhadze); 35. Batumskiy botanicheskiy sad Akademii nauk Gruzinskoy SSR (for Shanidze); 36. Tbilisskiy botanicheskiy sad Akademii nauk Gruzinskoy SSR (for Mandzhavidze); 37. Sochinskiy park Dendrariy (for Korkeshko); 38. Gosudarstvennyy Nikitskiy botanicheskiy sad imeni V.M. Molotova (for Sergeyev, Voloshin); 39. Krymskiy filial Akademii nauk SSSR (for Rybin); 40. Botanicheskiy sad Moldavskogo filiala Akademii nauk SSSR (for Ivanova); 41. Botanicheskiy sad Botanicheskogo instituta Akademii nauk Tadzhikskoy SSR (for Ryabova); 42. Botanicheskiy sad Kirgizskogo filiala Akademii nauk SSSR (for Gareyev); 43. Botanicheskiy

(continued on next card)

NAZAREVSKIY, S.L.---(continued) Card 4.

sad Akademii nauk Usbekskoy SSR (for Rusanov, Bochantseva); 44. Botanicheskiy sad Akademii nauk Turkmenskoy SSR (for Blinovskiy); 45. Respublikanskiy sad Akademii nauk Kazakhskoy SSR (for Klyshev, Mushegyan).

(Botanical gardens)

VASIL'YEV, A.V.; GULISASHVILI, V.Z., akademik; DOLUKHANOV, A.G.; MANDZHAVIDZE, D.V.; MATIKASHVILI, V.I.; MAKHATADZE, L.B.; MIRZASHVILI, V.I.; ODISHARIYA, K.N.; PRILIPKO, L.I.; RUKHADZE, P.Ye.; SAKHOKIA, M.F.; SKHIYTSRELI, V.S.; AVALIANI, N.M., red.izd-va; TODUA, A.R., tekhred.

[Dendroflora of the Caucasus; wild and cultivated trees and shrubs] Dendroflora Kavkaza; dikorastushchie i kul'turnye derev'ia i kustarniki. Tbilisi. Vol.1. [Gymnospermae. Chlamydospermae. Angiospermae - Monocotyledonae] Gymnospermae - golosemennye. Chlamydospermae - pokrovosemennye. Angiospermae - (Monocotyledoneae) - pokrytosemennye (odnodol'nye).1959. 406 p. (MIRA 13:6)

1. Akademiya nauk Gruzinskoy SSR, Tiflis. Institut lesa. 2. AN Gruzinskoy SSR (for Gulisashvili).
(Caucasus--Trees) (Caucasus--Shrubs)

MANDZHAVIDZE, D.V.

Role of the forest in controlling soil erosion in mountainous areas of Georgia. Izv. Bat. bot. sada no.11:91-118 '62. (MIRA 16:6)
(Georgia--Erosion) (Georgia--Forest influences)

MANDZHAVIDZE, David Vladimirovich

[Caucasian Selkova] [Kavkazskaia dzel'kva. Tbilisi, Izd-vo AN Gruz.SSR] 1962. 78 p. (MIRA 16:1)
(Georgia--Zelkova)

MANDZHAVIDZE, D.V.; MATINYAN, A.B.

Batum Botanical Garden; 1912-1962. Biul. Glav. bot. sada no.50:103-106 '63. (MIRA 17:1)

1. Botanicheskiy sad AN Gruzinskoy SSR, g. Batumi.

DMITRIYEVA, A.A.; MANDZHAVIDZE, D.V.

Smirnov's rhododendron in Adzharistan. Soob. AN Gruz. SSR 30 no.4: 461-466 Ap '63. (MIRA 17:9)

1. Batumskiy botanicheskiy sad AN GruzSSR. Predstavleno akademikom V.Z. Gulisashvili.

MANDZHAVIDZE, D.V.; MATINYAN, A.B.

Naturalization of some exotic plants in the wild flora of the Black Sea coast of Adzharistan. Biul. Glav. bot. sada no.54: 3-9 '64.

(MIRA 17:11)

1. Botanicheskiy sad AN GruzSSR, Batumi.

MANDZHAVIDZE, D.V.; MATINYAN, A.B.

Hamamelis virginiana L. on the Batum coast. Biul.Glav.bot.sada. no.58:109-111 '65. (MIRA 18:12)

1. Botanicheskiy sad AN Gruzinskoy SSR, g. Batumi.

MANDZHAVIDZE, D.V.

Some characteristics of the growth and development of oriental beech at the seacoast of Adzharistan. Izv.Bat bot. sada no. 12:67-74 '63.

Vertical distribution of oriental spruce and Caucasian pine (Pinus kamata) in western Georgia Ibid.:101-103 (MIRA.17:7)

MANDZHAVIDZE, G. D., Cand Agr Sci -- (diss) "Some methods of guided growing of grape vines for accelerated fruition." Tbilisi, Georgian Agricultural Inst Press, 1959. 30 pp; (Ministry of Agriculture Georgian SSR, Georgian Order of Labor Red Banner Agricultural Inst); 150 copies; free; (KL, 17-60, 164)

1. MANDZAVIDZE, G.F.

2. USSR (600)

4. Integral Equations

7. On a class of singular integral equations with discontinuous coefficients. Soob.ANGruz SSR No. 5 1950

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

1. MANDZAVIDZE, G. F.

2. USSR (600)

4. Integral Equations

7. On a system of singular integral equations with discontinuous coefficients. Soob. AN Gruz SSR No. 6 1950

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

MANDZHAVIDZE, G.F.

Mathematical Reviews
Vol. 14 No. 8
Sept. 1953
Analysis

7-13-54
LL

Math 3

Mandžavidze, G. F. On a class of singular integral equations with discontinuous coefficients. Soobščeniya Akad. Nauk Gruzin. SSR 11, 269–274 (1950). (Russian)

The author makes use of some of the notions and definitions found in Muskhelišvili, Singular integral equations . . . [OGIZ, Moscow-Leningrad, 1946; these Rev. 8, 586]. A study is made of the equation

$$(1)\quad K\phi = A(t_0)\phi(t_0) + \frac{1}{\pi i}B(t_0)\int_L \frac{\phi(t)dt}{t-t_0} + \int_L K_1(t_0, t)\phi(t)dt + \int_L K_2(t_0, t)\phi(t)dt = f(t_0),$$

the coefficients and f being in H (Hölder class) on L, except at most for a finite number of discontinuities ξ of the first kind; the unknown $\phi(t)$ is to be in H, except perhaps at the ξ, where $\phi(t)$ may have discontinuities of order <1; L is a finite set of disjoint, simple, closed, suitably smooth curves, bounding a connected domain. The adjoint of $K(\phi)$ is

$$K'\psi = A(t_0)\psi(t_0) - \frac{1}{\pi i}\int_L \frac{B(t)\psi(t)}{t-t_0}dt + \int_L \psi(t)K_1(t, t_0)dt + \int_L \psi(t)K_2(t, t_0)dt.$$

SOURCE

The author finds all the solutions of (1) in the class h. Of importance are the canonic function $Z(t)$ and the index H of (1). Some of the results are as follows. In order that $K\phi = f$ could be solved in h it is necessary and sufficient that $\Re\{\int_L f\psi_j dt\} = 0$ $(j = 1, \cdots, k')$, where the $\psi_j(t)$ constitute a complete system of linearly independent solutions in the class h' of $K'\psi = 0$. If k is the number of linearly independent solutions in h of $K\phi = 0$ and k' is the number of linearly independent solutions in h' of $K'\psi = 0$, then $k - k' = 2H$, where H is the index of the class h of $K\phi = 0$.

W. J. Trjitzinsky (Urbana, Ill.).

7-13-54
LL

MANDZHAVIDZE, G.F.

Mathematical Reviews
Vol. 14 No. 8
Sept. 1953
Analysis

Mandžavidze, G. F. On a system of singular integral equations with discontinuous coefficients. Soobščenija Akad. Nauk Gruzin. SSR 11, 351–356 (1950). (Russian)

The author presents a natural extension to systems of his work relating to a single equation, as indicated in the preceding review. With the aid of the generalized Noether theorems for a certain matrix integral equation, associated with the given system, the author establishes the fundamental theorems for his system. The results are similar to those obtained in the case of a single equation.

W. J. Trjitzinsky (Urbana, Ill.)

USSR/Mathematics - Singular Integral May/Jun 51

Concerning a Singular Integral Equation With Discontinuous Coefficients, and Its Application to the Theory of Elasticity," G. F. Mandzhavidze, Math Inst, Acad Sci Georgian SSR

"Prik Matemat i Mekh" Vol XV, No 3, pp 279-296

Studies singular integral eq with discontinuous coeffs which contains besides the sought-for function its complex conjugate (in the regular part). Results obtained are applied to exam of the eq set up by D. I. Sherman for soln of fundamental composite problem in the 2-dimensional

185T67

185T67

USSR/Mathematics - Singular Integral May/Jun 51
(Contd)

theory of elasticity. Considers composite (mixed) problem of flexing plate where part of margin of plate is held fast and part is free.
Submitted 26 Feb 51.

185T67

MANDZHAVIDZE, G. F.

MANDZHAVIDZE, G.F.

Call Nr: AF 1108825

Transactions of the Third All-union Mathematical Congress (Cont.) Moscow, Jun-Jul '56, Trudy '56, V. 1, Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, 1956, 237 pp.

Mention is made of Goluzin, G. M. Kuvayev, M. R., Semukhina, N. V., and Chistyakov, Yu. V.

There is 1 USSR reference.

Leont'yev, A. F. (Moscow). On interpolation of Entire Functions of a Finite Order. 86-87

There is 1 USSR reference.

Mandzhavidze, G. F. (Tbilisi). On the Approximate Solution of Boundary Problems of the Theory of Analytic Functions. 88

Melentsov, A. A. (Sverdlovsk). On the Hausdorff Transformations Theory. 88

There are 2 references, 1 of which is German, and the other a translation into Russian.

Card 27/80

MANDZHAVIDZE, G. F.

report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb '60.

168. S. D. Leites (Dnepropetrovsk): On space buckling of columns in the elastic-plastic range.

169. V. S. Lenskiy (Moscow): Vibro-creep at room temperature.

170. V. S. Lenskii (Moscow): Plasticity of metals under combined loading.

171. A. I. Leonov (Moscow): Some problems of non-stationary flow of an incompressible visco-elastic (Maxwellian) liquid.

172. A. I. Leonov, M. D. Rusinov (Moscow): Some problems of quasi-steady flow of an incompressible visco-elastic (Maxwellian) liquid.

173. M. Ia. Leonov (Lvov): The generalization of the torsion theory of thin-walled bars.

174. M. Ia. Leonov, V. V. Panasyuk (Lvov): The development of microcracks.

175. Yu. R. Lepik (Tartu): Plastic flow of circular plates under tension and bending of compression and bending.

176. S. G. Lekhnitskiy (Leningrad): Torsion of an anisotropic curved bar.

177. A. D. Lizarev (Sverdlovsk): Free vibrations and stability of ordinary and prestressed elastic restrained beams.

178. A Lisowski (Krakow): Displacement of rocks due to excavation of sloping layers.

179. B. V. Litvinov (Kiev): On the application of matrix transformations to the solution of large sets of linear equations of elasticity theory.

180. O. I. Lotkin (Tomsk): The selection of optional parameters for structures of equal stability consisting of plates and stringers.

181. P. A. Lukash (Moscow): Large deflections of shallow shells of non-linear elastic materials.

182. Ia. B. Lvin (Voronezh): Methods for the solution of the problems of axisymmetric states of stress in shells of revolution.

183. B. A. Malakhovskii (Omsk): Analysis of an orthotropic circular conical shell under an arbitrary load applied to a ring.

184. S. V. Malashenko (Kiev): On the experimental study of strains in plates and shells.

185. N. I. Malinin (Novosibirsk): Creep strains and ruptures of high polymers.

186. R. L. Malkina (Sverdlovsk): Vibrations of non circular cylindrical shells.

187. A. K. Malmeisters (Riga): Some problems of combined loading of quasi-isotropic bodies.

188. K. A. Maltsev (Leningrad): The influence of structural discontinuity in concrete on its strength.

189. S. O. Mamedova (Baku): Investigation of the state of stress in a square prism with coaxial cylindrical hole under internal pressure.

190. G. V. Mandzhavidze (Tbilisi): Solving the plane elastic problem for anisotropic bodies by reduction to the problem of linear coupling with "displacements".

191. L. I. Manevich, Yu. A. Shevliakov (Dnepropetrovsk): The stability of a cylindrical shell in bending.

192. V. M. Marshenko (Moscow): Stress and strain in naturally twisted bars.

193. V. I. Makhovikov (Taganrog): The problems of conformal transformation and plane elasticity for the exterior of an infinite number of holes.

194. Ia. A. Macharet (Moscow): The design of finite and infinite beams on elastic foundation including time effects and without adopting the hypothesis of Zimmerman and Winkler.

195. A. S. Malievarskii (Stalino): Vibrations of a curved bar in an elastic medium and on elastic supports.

196. S. R. Meschian (Erevan): An experimental study of basic creep laws for soils.

197. G. I. Migirenko (Novosibirsk): On statically equivalent loadings.

198. M. Sh. Mikeladze (Tbilisi): Contribution to the theory of plastic shells of uniform strength.

199. R. S. Minasian (Erevan): On the bending of a simply supported parallelogram plate.

200. M. V. Mikhailov (Moscow): Evaluation of the rheological properties of elastic, visco-plastic materials in homogeneous strain-rate under constant shearing stress.

PHASE I BOOK EXPLOITATION SOV/3981

Issledovaniya po sovremennym problemam teorii funktsiy kompleksnogo peremennogo; sbornik statey (Investigation of Modern Problems in the Theory of Complex Variables; Collection of Articles) Moscow, Fizmatgiz, 1960. 544 p. 3,000 copies printed.

Ed. (Title page): A. I. Markushevich; Eds. (Inside book): V. S. Vilenskiy and S. Ya. Khavinson; Tech. Ed.: N. Ya. Murashova.

PURPOSE: This book is intended for specialists in the theory of functions of a complex variable. It may also be used by advanced university students, scientific workers, and specialists in other fields of mathematics.

COVERAGE: The book contains 48 papers originally read at the Third All-Union Conference on the Theory of Functions of a Complex Variable held at Moscow University from May 28 to June 4 1957. The articles treat problems in the modern theory of functions and its applications. The book is divided into 7 parts. The first part discusses the problem of monogeneity, power series, boundary and extremal properties. The second part discusses entire functions and interpolation and approximation problems. The third part discusses functions of many complex variables. The fourth part ... conformal mappings and boundary-value problems. The ... Riemann surfaces and the theory of distribution ... discusses generalized analytic functions ... miscellaneous problems. ...

PART III

PART V

Card 14/

16.3000

26494
S/044/61/000/004/004/033
C111/C222

AUTHOR: Mandzhavidze, G.F.

TITLE: Approximate solution of boundary value problems of the theory of analytic functions

PERIODICAL: Referativnyy zhurnal. Matematika, no. 4, 1961, 19, abstract 4 B 96 ("Issled. po sovrem. probl. teorii funktsiy kompleksn. peremennogo". M., Fizmatgiz, 1960, 365-370)

TEXT: The author gives an approximate solution of the Riemannian boundary value problem for a piecewise holomorphic matrix $\Phi(z)$, which can be determined from the boundary condition

$$\Phi^+(t) = G(t)\Phi^-(t) + F(t) \qquad (1)$$

given on a simple smooth closed curve L. (On the problem (1) cf. the paper of the author and B.V. Khvedelidze (R zh Mat, 1959, 11008)). At first the author considers the case, where the matrices G(t) (det G(t) $\neq 0$) and F(t) belong to the class H_μ (on L they satisfy the Hölder condition with the exponent μ). The matrix G(t) is approximated by a rational matrix R(t) ; the problem (1) is reduced to the problem with the boundary

Card 1/3

Approximate solution of boundary ...

condition

$$\varphi^+(t) - \varphi^-(t) = g(t)\varphi^-(t) + F(t) \quad , \qquad (1')$$

where $g = (G - R)R^{-1}$. The problem (1') is solved by a successive approximation whereby the existence of a solution of the problem $(1)_1$ is proved which may have poles in certain points of the outer region D^{-1}. Furthermore, the author proves the existence of a solution of the homogeneous problem

$$\alpha^+(t) = G(t)\alpha^-(t) \quad . \qquad (1_0)$$

This solution may have poles only in D^{-1} too, and its determinant may vanish only in D^{-1}. Starting from this solution the so-called canonical solution can be constructed in a well-known manner, and with the aid of it one can establish the whole theory of the boundary value problems (1). In the second part of the paper the author considers the case where the given matrices $G(t)$ and $F(t)$ satisfy the condition H_μ everywhere on L with the exception of a finite number of points in which they may have

Card 2/3

26494
S/044/61/000/004/004/033
C111/C222

Approximate solution of boundary ...

discontinuities of first kind. By the introduction of matrix factors of a well-known structure into the boundary condition, the author reduces the problem with discontinuous coefficients to a problem with continuous coefficients, which then is investigated with a method being similar to the above one.

[Abstracter's note : Complete translation.]

Card 3/3

MIKELADZE, Shalva Yefimovich; MANDZHAVIDZE, G.F., red.

[Solution of numerical equations] Reshenie chislennykh uravnenii. Tbilisi, Metsniereba, 1965. 270 p. (MIRA 18:6)

MANDZHAVIDZE, N.A.

Calculating the hydraulic impact in pressure systems with regulating reservoirs having resistance [in Armenian, with summary in Russian]. Trudy Energ. inst. AN Gruz. SSR 8:49-63 '53. (MIRA 11:10)
(Hydraulic engineering)

AID P - 3379

Subject : USSR/Hydr Eng

Card 1/1 Pub. 35 - 10/16

Author : Mandzhavidze, N. F., Kand. Tech. Sci.

Title : Computing resistance in surge tanks

Periodical : Gidr. stroi., 6, 31-37, Je 1955

Abstract : The author discusses the computation of the hydraulic hammer created between the surge tank and the penstock. A mathematical analysis is given, illustrated by many examples and a table. The water level fluctuations in the surge tank are presented with curves. Six diagrams. Seven Russian references, 1951-1955.

Institution : None

Submitted : No date

Mandzhavidze, N.F

124-1957-10-11473

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 10, p 43 (USSR)

AUTHOR: Mandzhavidze, N. F.

TITLE: On the Application of a Multi-Parameter Method to Calculations Pertaining to Power Utilization (O primenenii mnogoparametricheskogo metoda v energoekonomicheskikh raschetakh)

PERIODICAL: Tr. In-ta energ. AN Gruz SSR, 1956, Vol 10, pp 79-88

ABSTRACT: The paper deals with a particular instance of the application of a multi-parameter method to the calculation of the basic power-utilization parameters, namely, the available flow, the number of working units, and the diameter of the turbine wheel, for a low-head hydro-electric power station located within a city. Bibliography: 4 references.

G. A. Varshavskiy

Card 1/1

MANDZHAVIDZE, N.F.

Study of the stability of steady-state conditions of hydroelectric power stations with long equalizing reservoirs on a pressure diversion structure. Trudy Inst. energ. AN Gruz. SSR 17:77-93 '63. (MIRA 17:7)

MANDZHAVIDZE, Natela Ferapontovna; MAMRADZE, Grigoriy Petrovich; SHENGELIYA, P.G., prof., red.

[Catalog of high dams; with a height greater than 75 m.] Katalog vysokikh plotin; vysotoi bolee 75 m. Tbilisi, Izd-vo AN Gruz. SSR, 1963. 185 p. (MIRA 18:5)

1. Chlen-korrespondent AN Gruz.SSR (for Shengeliya).

MANDZHAVIDZSE S.M.

ANIKINA, M. Kh., KOTLYAREVSKIY, D. M., KOSLOV, A. A., DZURAVLEVA, M. S., MANDZHAVIDZSE S. M., MESTRVIRISHVILI, A. N. NIAGU, D. V., PETROV, N. I. ROZANOVA, A. M., RUSAKOV, V. A. OKONOV, E. O., TAKHTAMYSHEV, G. G., CHKHEIDSE, L. B.

"Decay Properties of K^0-Mesons"

Report presented at the Intl. Conference on High Energy Physics, Geneva, 4-11 July 1962

Joint Inst. for Nuclear Research
Lab. of High Energies, Dubna, 1962

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001032120007-5"

MANDZHAVIDZE, Nateia Ferapontovna; MAMRADZE, Grigoriy Petrovich; SHENGELIYA, F.G., prof., red.

[Catalog of high dams; height greater than 75 m.] Katalog vysokikh plotin (vysotoi bolee 75 m) Tbilisi, Izd-vo AN Gruz. SSR, 1963. 185 p. (MIRA 18:1)

1. Direktor Instituta energetiki, chlen-korrespondent AN Gruz.SSR (for Shengeliya).

MANDZHGALADZE, R.N., otv. red.; DZHANGAVADZE, O.Sh., red.; KVANCHAKHADZE, G.Sh., red.; KIPIANI, S.P., red.; KURASHVILI, M.Ye., red.; MDINARADZE, V.L., red.; ROKVA, V.A., red.; ROSTOMBEKOVA, N.V., red.; KHERODINASHVILI, A.Z., red.

[Materials of the scientific session dedicated to the 35th anniversary of the Institute on June 4th - 6th, 1964] Materialy nauchnoi sessii, posviashchennoi 35-letiiu instituta, 4-6 iiunia 1964 g. Tbilisi, 1964. 110 p. (MIRA 18:1)

1. Gruzinskiy nauchno-issledovatel'skiy institut gigiyeny truda i profzabolevaniy. 2. Gruzinskiy nauchno-issledovatel'skiy institut gigiyeny truda i profzabolevaniy.

MANDZHAVIDZE, U.

BAKRADZE, V., komandir parashyutnogo zvena (Tbilisi); MANDZHAVIDZE, U., instruktor (Tbilisi).

The guarantee of success is the number of active members. Kryl. rod. 8 no.8:7 Ag '57. (MLRA 10:9)
(Tbilisi--Parachutists)

MANDZHAVIDZE, V.

85-8-4/18

AUTHORS: Bakradze, V., Commander, Sportsmen-Parachutists Group, Mandzhavidze, U., Instructor

TITLE: A Large Number of Active Workers is a Pledge of Success (Zalog uspekha v shirokom aktive)

PERIODICAL: Kryl'ya Rodiny, 1957, Nr 8, p. 7 (USSR)

ABSTRACT: The author describes the activities of the Georgian Club of Sportsmen-Aviators (respublikanskiy aviatsionno-sportivnyy klub) in the field of parachutism, and stresses the interest the young people of the city of Tbilissi show in this kind of sport. The endeavors to extend the activities of the parachute section of the club to the neighboring towns are related, as well as the endeavors to increase the number of persons qualified to serve as voluntary instructors. The inadequacy of the training equipment at the disposal of the parachute section is hinted by a detailed description of the efforts of the members of the section to overcome the ensuing difficulties. In the closing paragraph of the

Card 1/2

A Large Number of Active Workers is a Pledge of Success (Cont.)

article the authors assert the necessity of making the DOSAAF rayon committees work more actively. The article contains no data of scientific interest.

AVAILABLE: Library of Congress

Card 2/2

USSR

1229. Some examples of the decay of V-particles. G. E. CHIKOVANI, Z. Sit. MANDZHAVIDZE, L. D. GEDEVANISHVILI and [illegible] Zh. eksper. teor. Fiz., 26, No. 4, 505–6 (1954) In Russian.

In 1800 photographs taken at 3900 m with a cloud chamber in a field of 6800 gauss under 20 cm Pb, and activated by systems of counters responding to penetrating showers, 4 V-events were found. The 1st is the decay of a $2400 \pm 200m_e$ V^0 into a proton (1·44 BeV/c) and negative meson (0·4 BeV/c). The coefficient $\alpha = (p_+^2 - p_-^2)/p_0^2$ is 0·61. The 2nd is probably $V^0(667 \pm 70m_e) \rightarrow \pi^+(0{\cdot}12$ BeV/c) $+ \pi^-$ (0·34 BeV/c) with $\alpha = -0{\cdot}51$. The other 2 cases show changes of direction of 120° in a 0·4 BeV/c negative, and 36° in a 0·63 BeV/c positive track, respectively, and can be interpreted as decays of V^+.

– W. J. SWIATECKI

Tbilisi State U., Inst Physics, AS GeoSSR

GEDEVANISHVILI, L.D.; MANDZHAVIDZE, Z.Sh.; ROYNISHVILI, N.N.; TSAGARELI, E.I. TSINTSABADZE, A.I.; CHIKOVANI, G.Ye.

Pulse distribution of charged particles in electronic and nuclear showers. Izv. AN SSSR. Ser. fiz.19 no.6:748-749 N-D '55.(MLRA 9:4)

1.Institut fiziki AN Gruz.SSR i Tbilisskiy gosudarstvennyy universitet imeni I.V.Stalina.
(Cosmic rays) (Nuclear physics)

120-3-13/40

AUTHORS: Mandzhavidze, Z.Sh. and Chikovani, G.Ye.

TITLE: Stabilization of the Supply Current to an Electromagnet. (Stabilizatsiya toka pitaniya elektromagnita)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1957, Nr 3, pp.69-71 (USSR)

ABSTRACT: An electronic stabilizing circuit is described which stabilizes currents to within ±0.2% up to 300 A, when the input voltage varies by ±20% and the load by +50%. Fig.1 shows the circuit. The input element is a 200 A, 100 mV shunt connected in series with the load. The voltage from the shunt is applied to a potentiometer, the other arm of which is connected to a Weston element (cell). By varying the ratio of the resistances of the potentiometer, the potential between A and Б can be made zero for any given current I_o through the electromagnet windings. If the current increases, then a negative difference potential develops across A and Б. If the current decreases, the potential is positive. The difference potential is chopped by the vibrator РП-4, which is driven by 50 c/s, 6 V. The chopped signal is amplified in the two stages of the valve 6Н9 and passed to the grid of the 6Ж3. With

Card 1/3

Stabilization of the Supply Current to an Electromagnet.

square signals on the 6H6 grid, a sinusoidal voltage appears across TpI. The amplitude depends on the magnitude of the input signal. The sinusoidal voltage is either in phase or 180° out of phase with the 50 c/s supply to PT-4 depending on the polarity of the input signal. This reference frequency is applied via TpII to the phase sensitive detector - the double triode 6X6. With no input signal, the potentiometer R14 is set so that there is no voltage across D and E. With increase of magnet current D goes negative with respect to earth and with decrease of current, positive. The detected signal is applied to the grid of the last valve 6T9, in the anode circuit of which is connected the control winding of the electro-dynamic amplifier MY-12A. The output of this amplifier feeds the control winding of the DC generator TH-400. The procedure for setting up the circuit is given, followed by a short analysis of the circuit. To obtain maximum stabilization, it is necessary to work with a gain greater than the critical gain. The relaxation oscillations which arise at

Card 2/3

120-3-13/40

Stabilization of the Supply Current to an Electromagnet.

the critical condition are suppressed by introduction of 1st derivative negative feedback. G. N. Mushkelishvili and O. A. Kancheli helped in this work. There is 1 figure and 6 references, 4 of which are Russian and 2 English.

ASSOCIATION: Institute of Physics AS Gruzinskiya SSR (Institut fiziki AN Gruzinskoy SSR)

SUBMITTED: December 29, 1956.

AVAILABLE: Library of Congress.

Card 3/3 1. Electromagnet current-Stabilization 2. Electronic circuit-Stabilizer

Mandzhavidze, Z. Sh.

AUTHORS: Mandzhavidze, Z.Sh., and Chikovani, G.Ye. 120-6-6/36

TITLE: A Double Rectangular Wilson Chamber for the Observation of Unstable Heavy Particles (Pryamougol'naya sdvoyennaya kamera Vil'sona dlya nablyudeniya nestabil'nykh tyazhelykh chastits)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1957, No.6, pp. 30 - 33 (USSR)

ABSTRACT: The chamber was constructed in 1954 for the Academy of Sciences of the Georgian SSR and the Tbilisi State University. The object was to observe hyperons and heavy mesons produced in absorbers placed both directly above the chamber as well as inside it. The chamber works in a magnetic field of 4 500 Oe. It consists of two independent chambers with a dividing chamber between the working volumes. The working volumes and the chamber between them are in an all-metal three-sectional body while the expansion device isplaced in a two-section massive base. Such a system is convenient for the following reasons: 1) the walls of the middle chamber act as the thermal screen because they are part of the massive body of the chamber and have good thermal conductivity. Absorbers placed in this chamber do not affect the thermal regime and do not lead to an

Cardl/3

A Double Rectangular Wilson Chamber for the Observation of Unstable Heavy Particles.

additional distortion of track curvature which is often observed when absorbers are put directly into the chamber (Ref.1); 2) Counters can be placed (if necessary) in the middle chamber; 3) The use of separate chambers placed one above the other (Ref.2) is not always convenient. Constructional details of the chamber are shown in Fig.1. The soft, iron body is divided into three sections by means of partitions made of brass and 6 mm thick. The two extreme sections form the working volumes of the chamber with an illuminated volume of 280 x 106 x 100 mm^3 each. In the dividing compartment formed by the middle section one can place various absorbers. Suitable glass windows are placed in the walls of the chamber. All the internal parts were nickel-plated. In order to remove distortions due to convection currents, the chamber is specially thermostatted to about 1/100th of a degree Centigrade. The working cycle of the chamber is fully automatic. Control measurements have shown that the curvature of μ meson tracks is in agreement with the calculations in Ref.4. The following persons collaborated: E.L. Andronikashvili, L.D. Gedevanishvili, R.I. Dzidziguri, A.A. Kozlov,

A Double Rectangular Wilson Chamber for the Observation of Unstable Heavy Particles. 120-6-6/36

D.M. Kotlyarevskiy, N.N. Roymishvili, A.I. Tsintsabadze, V.D. Tsintsadze and P.A. Novik.
There are 4 diagrams, 4 references, 1 of which is a Slavic translation from English.

ASSOCIATION: Physics Institute of the Ac.Sc. Georgian SSR (Institut Fiziki AN Gruz. SSR)
Tbilisi State University im. I.V. Stalin (Tbilisskiy Gosudarstvennyy Universitet im. I.V. Stalina)

SUBMITTED: December 29, 1957.

AVAILABLE: Library of Congress

Card 3/3

AUTHOR: MANDZHAVID Z E,Z.SH., ROYNISHVILI ,N.N., CHIKOVANI,G.Ye. 56-7-61/66

TITLE: Observation of the Anomalous Decay of Charged Particles in the Wilson Chamber. (Nablyudeniye anomal'nogo raspada zaryazhennycy chastitsy v kamere Vil'sona, Russian)

PERIODICAL: Zhurnal Eksperim. i Teoret.Fiziki, 1957, Vol 33, Nr 7, pp 303-303 (U.S.S.R.)

ABSTRACT: A slow particle with a more than 20-fold ionization enters the WILSON chamber (observation took place in the Elbrus Laboratory) and decays, on which occasion it emits a positive particle with a momentum of 352^{+94}_{-61} MeV/c at an angle of 95°. At present it is presumed that the decay of a particle which is heavier than a K-meson, was observed. (With 1 Illustration).

ASSOCIATION: Physical Institute of the Georgian Academy of Sciences of the U.S.S.R. (Institut fiziki Akademii nauk Gruzinskoy S.S.R.

PRESENTED BY:

SUBMITTED: 19.4.1957

AVAILABLE: Library of Congress

Card 1/1

AUTHORS: Mandzhavidze, Z. Sh., Roynishvili, N. N., SOV/56-34-5-9/61
Chikovani, G. Ye.

TITLE: The Observation of the Decays of Charged Particles in a Double Cloud Chamber (Nablyudeniye raspadov zaryazhennykh chastits v sdvoyennoy kamere Vil'sona)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958, Vol. 34, Nr 5, pp. 1110-1115 (USSR)

ABSTRACT: This paper analyzes 10 decays of heavy charged particles. These particles were observed by means of a device which is similar to the device of C.H. Jork et al. (Ref 2) Investigations were carried out in the Vysokogornaya El'brusskaya kosmicheskaya laboratoriya (El'brus High Mountain Cosmic Laboratory) For the measurements discussed in this paper a rectangular double cloud chamber was used. This cloud chamber consists of two independent volumes (each of them has the dimensions 280x100x110 mm) and three sections for the absorber. The two independent volumes are united by the same carcass. The cloud chamber was filled with argon (1000 torr) and a mixture of 70 % ethyl alcohol and 30 % water was used as condensate The first series of experiments was carried out with copper ab-

Card 1/4

The Observation of the Decays of Charged Particles in a Double Cloud Chamber

SOV/56-34 5-9/61

sorbers, the second with lead absorbers The magnetic field strength in the working volume had the value 4300 Oe. 11559 photographs were taken within 2836 hours, and 2269 penetrating showers were recorded by these photographs More- over, 10 forked tracks were observed on these photographs, they may be interpreted as $V^{\pm}$-decays. The authors found also 22 V^{0}-decays, 1 decay of a τ^{+}-meson, 1 decay of 2 pions (while they were moving) and 13 stars. The results of the measure- ments of the momenta, angles and the approximate values of the ionization are compiled in a table. All the observed de- cays, (with the exception of one), taking account of the observation errors, lie within the allowed range for hyperons and K-mesons. Only one case can be exactly interpreted as the decay of a K-meson, for all the other cases it is impossible to discern between K - and Y - decays. Among the decay products no proton was found. The $V^{\pm}$ decays, are divided into two groups, according to the character of production. The 6 particles of the first group have a very low ionization caused by the pri- mary particles. The second group consists of 4 slow particles with rather a high ionization These 4 particles are not con-

Card 2/4

The Observation of the Decays of Charged Particles in a Double Cloud Chamber

nected with a visible interaction and are generated far from the place of the decay. One decay is interpreted as the decay of a particle which is heavier than a K-meson. It is possible to assume that this particle is the charged analogon of the neutral meson the decay of which was observed by Kovan (Ref 12).
The authors thank Professor E.L. Andronikashvili for supervising these investigations, and also the collaborators of the Tbilisskiy gosudarstvennyy universitet (Tbilisi State University), L.D. Gedevanishvili and E.I. Tsagareli, and also the collaborators of the Institut fiziki (Physics Institute) R.I. Dzidziguri, A.I. Tsintsabadze, V.D. Tsintsadze. There are 4 figures, 3 tables, and 13 references, 5 of which are Soviet.

ASSOCIATION: Institut fiziki Akademii nauk Gruzinskoy SSR (Physics Institute AS Georgien SSR) Tbilisskiy gosudarstvennyy universitet (Tbilisi State University)

SUBMITTED: April 12, 1958

Card 3/3

SOV/56-34-5-9/61

The Observation of the Decays of Charged Particles in a Double Cloud Chamber

1. Particles--Decay 2. Cloud chambers--Applications 3. Cloud chambers--Performance 4. Particles--Photographic analysis

Card 4/4

MANDZHAVIDZE, Z. S.

OBSERVATION OF HEAVY NON-STABLE PARTICLES IN PENETRATING COSMIC RAY SHOWERS
Z.S.Mandzhavidze, N.N. Roinishvili, G.E. Chikovani

The production of heavy non-stable particles was studied in a magnetic field cloud chamber controlled by penetrating showers. 139 $V^{\pm}$ and 34 $V^{\pm}$ - particles were observed.

On the basis of the obtained data, the existence of "forward-backward" asymmetry of Λ° disintegration products is considered. The lifetimes for Λ°, Θ° and $\Sigma^{\pm}$ - hyperons are determined. The value obtained for $\tau_{\Lambda^{\circ}}$ agrees with the preliminary estimation given in JETP V. 34, 1,110, 1958 and does not contradict the results obtained with accelerators (Proceedings of the 8th Rochester Conference).

The value for the Λ° particle lifetime, determined for all the cases observed, agrees with known cosmic data and is therefore larger than the time $\tau_{\Lambda^{\circ}}$ obtained with accelerators. At the time, for those cases which correlate with the visible point of shower generation, the value obtained for $\tau_{\Lambda^{\circ}}$ proves to be closer to the value obtained with accelerators. An explanation is given for the difference existing between the value of the Λ°-particle lifetime determined by cosmic data and that obtained with accelerators.

Report presented at the International Cosmic Ray Conference, Moscow, 6-11, July 1959

31542
S/627/60/002/000/027/027
D299/D304

3.2410 (2205, 2705, 1559)

AUTHORS: Mandzhavidze, Z. Sh., Roynishvili, N. N., Chukovani, G. Ye., Kozlov, A. A., Kotlyarevskiy, D. M., Tatalashvili, N. G., and Tsintsibadze, A. I.

TITLE: Study of penetrating showers at an altitude of 2000 m above sea level

SOURCE: International Conference on Cosmic Radiation. Moscow, 1959. Trudy. v. 2. Shirokiye atmosfernyye livni i kaskadnyye protsessy, 338-341

TEXT: The properties of unstable heavy particles were studied by means of a magnetic cloud chamber with lead absorbers. Among 8700 nuclear interactions, 139 cases of decay of neutral particles were observed, as well as 29 decay processes of charged strange particles. In addition, 11 decay processes, described by the authors in an earlier work, are also included in the study. As a result of the investigation of neutral particles, 45 V^0-shaped tracks were iden-

Card 1/ 4

Study of penetrating ...

tified as decays of Λ^0-hyperons, and 38 - as θ^0-mesons. Fifty-six of the remaining V^0-shaped tracks could not be identified. Out of 40 $V^{\pm}$-particles, 1 was interpreted as τ-meson decay, 7 could be interpreted as K-meson decay and 2 - as Σ-hyperons. The other particles could not be interpreted by decay-dynamics only; for their interpretation considerations had to be employed which proceed from the considerable difference in the lifetime of hyperons and K-mesons respectively. In Solov'yev's work (Ref. 3: preprint O.I.Ya. I.) it is shown that for strong interactions involving strange particles, there are no obvious theoretical assumptions which would require conservation of parity. If such interactions are not invariant with respect to space inversion, one should expect the appearance of hyperon polarization in the plane of generation. These considerations were used as a basis for constructing the angular distribution protons of the decay of Λ^0-particles with momenta below 800 Mev./c. Further, the authors investigated the lifetime of

Card 2/ 4

Study of penetrating ...

Λ^0-particles by 2 methods. By the first method, they obtained for the mean lifetime the value

$$\tau_{\Lambda^0} = (2{,}83 \overset{+\ 2{,}32}{-\ 0{,}99}) \cdot 10^{-10} \text{ sec}$$

The second method yielded

$$\tau_{\Lambda^0} = (3{,}02 \overset{+\ 1{,}14}{-\ 0{,}72}) \cdot 10^{-10} \text{ sec}$$

Further, an attempt was made to determine the lifetime of Σ-hyperons. Earlier results in this respect are in disagreement. It was found that 13 of the decay processes of charged particles can be considered as $\Sigma^{\pm}$-hyperons. The lifetime of 9 of these particles is

Card 3/4

Study of penetrating ...

$$\tau_{\Sigma^{\pm}} = \leq (0{,}57 \begin{smallmatrix} + 0{,}36 \\ - 0{,}16 \end{smallmatrix}) \cdot 10^{-10} \text{ sec}$$

There are 1 table and 9 references: 3 Soviet-bloc and 6 non-Soviet-bloc. The references to the English-language publications read as follows: S. Hayakawa, Phys. Rev., 108, 1533, 1957; D. A. Glaser. Ann. International Conference on High Energy Physics at CERN, 1958; I. Snayder, W. Y. Chang and I. G. Gupta. Phys. Rev., 106, 149, 1957.

ASSOCIATION: Institut fiziki AN Gruz.SSR (Physics Institute AS Georgian SSR)

Card 4/4

S/058/62/000/006/013/136
A061/A101

AUTHORS: Mandzhavidze, Z. Sh., Roynishvili, N. N., Chikovani, G. Ye.

TITLE: Angular distribution of Λ^0-hyperon decay products

PERIODICAL: Referativnyy zhurnal, Fizika, no. 6, 1962, 33, abstract 6B228 ("Tr. In-ta fiz. AN GruzSSR", 1960, v. 7, 193 - 195, English summary)

TEXT: If, in strong interactions with the participation of strange particles, parity is not conserved, this may manifest itself in the presence of "forward-backward" asymmetry in Λ^0-hyperon decay with respect to the line of flight of hyperons in the center-of-mass system of their generation. The literature contains indications as to the presence of the effect of asymmetry in the decay of Λ^0 generated on compound nuclei and in hydrogen by pions with a momentum of some Bev/c and by particles of cosmic radiation. On the other hand, no longitudinal polarization of Λ^0-hyperons has been established in a number of studies conducted on hydrogen at low and mean energies. In the present experiment, conducted with the aid of a doubled Wilson chamber at 1,800 m above sea level,

Card 1/2

S/058/62/000/006/013/136
A061/A101

Angular distribution of...

as much as 162 V^o-decays were found. The chamber was controlled by penetrating showers. From among lead-generated V^o-decays, as much as 54 Λ^o-hyperons were identified. Of these, 24 Λ^o-decays with a momentum < 800 Mev/c were picked out. In these decays, the coefficient of asymmetry was found to be equal to -0.59 ± 0.28 in good agreement with -0.56 ± 0.15 and -0.58 ± 0.17 of earlier findings.

G. L.

[Abstracter's note: Complete translation]

Card 2/2

S/058/62/000/003/032/092
A061/A101

24.6700

AUTHORS: Mandzhavidze, Z. Sh., Roynishvili, N. N.

TITLE: Strange-particle energy distribution

PERIODICAL: Referativnyy zhurnal, Fizika, no. 3, 1962, 50, abstract 3B412 ("Pizikis institutis shromebi. Sakartvelos SSR Metsnierebata Akademia, Tr. In-ta fiz. AN GruzSSR", 1960, v. 7, 197 - 200, English summary)

TEXT: Spectra of Λ°, θ°, and $\Sigma^{\pm}$ particles generated in lead by cosmic ray particles with a mean energy of ~20 Bev were taken at 1,800 m above sea level using a rectangular double Wilson chamber placed in the magnetic field. The spectra of Λ° particles and $\Sigma^{\pm}$ hyperons have similar distributions of about equal width with a sharp maximum in the 500-Mev region, while the θ° meson spectrum appears as sloping and spreads up to 5.5-Bev energies. This result may be explained either by the strong anisotropy of the angular distribution of Λ° and $\Sigma^{\pm}$ hyperons in the center-of-inertia system or by similar features of the generation of different types of baryons on quasi-free nucleons of the target.
[Abstracter's note: Complete translation] V. Guzhavin

Card 1/1

MANDZHAVIDZE, Z.Sh.; ROYNISHVILI, N.N.; GERSAMIYA, D.V.; KOZLOV, A.A.; KOTLYAREVSKIY, D.M.; PURTSELADZE, T.D.; TATALASHVILI, N.G.; SHTEMANETYAN, G.Z.

Lifetime of charge $\Sigma^{\pm}$ hyperons. Trudy Inst.fiz.AN Gruz.SSR 8:125-129 '62. (MIRA 16:2)

(Hyperons)

S/048/62/026/006/004/020
B125/B112

AUTHORS: Mandzhavidze, Z. Sh., and Roynishvili, N. N.

TITLE: Some problems of strange particle production

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 26, no. 6, 1962, 716 - 721

TEXT: A study was made of the energy distribution of the heavy unstable particles, with energies of some dozens of Bev, present in the penetrating cosmic radiation showers. Further, the distribution of the transverse momenta of the strange particles was investigated on the basis of observations made on 50Λ^0-, 42 θ^0-, and 18$\Sigma^{\pm}$-particles in a Wilson chamber at 1800 m above sea level. The obvious similarity of the $\Sigma^{\pm}$- and Λ^0-hyperona points to a similarity of the baryon energy distribution in multiple particle production at some dozens of Bev. If the intranuclear cascade processes influence the production of Λ^0-, $\Sigma^{\pm}$- and θ^0-particles equally, then the energy distribution of the Λ^0- and also of the $\Sigma^{\pm}$-hyperons is much

Card 1/3

more anisotropic than that of the θ^0-mesons. The present results are well consistent with new results got with 8 Bev pions in a propane chamber of the OIYaI. The difference in the mean values of the transverse momenta $p_\perp$ of the non-pion particles is probably due to the small increase of $p_\perp$ in the energy range between the threshold and 10 Bev. If the thermal motion of the liquid elements causes the $p_\perp$-spectra, then the $p_\perp$-spectrum of the mixture of the particles observed determines their temperature of departure $kT(1.1^{+0.6}_{-0.1})m_\pi c^2$. This temperature agrees well with the transverse pion momenta.

$$\left\langle \left(\frac{p_\perp}{mc}\right)^2 \right\rangle = \left\langle \left(\frac{p_\perp}{mc}\right)^2 \right\rangle_{a=0} + a^2\left(1 + 2\left\langle \left(\frac{p_\perp}{mc}\right)^2 \right\rangle_{a=0}\right),$$

are the root mean square momenta as a function of the hydrodynamic velocity. At different values of a, the root mean square momenta depend approximately linearly on their temperature of departure. If Landau's theory is valid also if $E_0^* = 10^{12}$ ev, then the transverse heavy particle momenta will probably increase rapidly if the energy increases from 10^{10} to 10^{12} ev. If

Some problems of strange particle production

S/048/62/026/006/004/020
B125/B112

the conditions of existence of the transverse momenta imply Heisenberg's uncertainty principle, then the results of the present paper indicate the structure of the region of particle production. The region of strange particle production has the radius $\langle r^2 \rangle_V^{1/2} \geqslant 0.37 \cdot 10^{-13}$ cm. There are 8 figures. The most important English-language reference is: E. R. Awunor-Renner, L. Blaskovith, R. French, C. Chesquer, Y. B. de Minvielle, Devau, W. W. Neale, C. Pelletier, P. Rivet, A. B. Sahiar, Y. O. Skillicon, Nuovo cimento, 17, 134 (1960).

Card 3/3

L 19639-63 EWT(m)/BDS AFFTC/ASD

ACCESSION NR: AP3007064 S/0056/63/045/003/0469/0473

72
66

AUTHORS: Anikina, M. Kh.; Gogitidze, O. N.; Zhuravleva, M. S.; Kozlov, A. A.; Kotlyarevskiy, D. M.; Mandzhavidze, Z. Sh.; Mestvirishvili, A. N.; Nyagu (Neagu), D.; Okonov, E. O.; Petrov, N. I.; Rozanova, A. M.; Rusakov, V. A.; Takhtamyshev, G. G.; Chkhaidze, L. V.; Wu Tsung-fan; Tserelov, A. A.

TITLE: Observation of the decays $K_2^0 \to \pi^+ + \pi^- + \pi^0$

SOURCE: Zh. eksper. i teoret. fiziki, v. 45, no. 3, 1963, 469-473

TOPIC TAGS: neutral kaon decay, four charged particle decay, decay probability, proton synchrotron, cloud chamber

ABSTRACT: Four decays of long-lived K^0 mesons with concomitant emission of four charged particles have been observed in a cloud chamber bombarded by a neutral particle beam from the OIYaN (Joint Inst. of Nuc. Research) proton synchrotron. All four events are identified

Card 1/3

as the decays

$$K_2^0 \to \pi^+ + \pi^- + \pi^0 \begin{cases} \gamma \\ e^+ + e^- \end{cases} \qquad (1)$$

An estimate of the probability of the decay $K_2^0 \to \pi^+ + \pi^- + \pi^0$ relative to all K_2^0 decays involving secondary particles yields a value 0.08 ± 0.04. "In conclusion, the authors express their gratitude to engineers N. Rusishvili and A. Yu. Shtayerman of the Physics Institute of the Georgian Academy of Sciences, who participated in the construction and adjustment of the cloud chamber. The authors are also grateful to the proton cyclotron crew and to the group of laboratory assistants. The authors are most grateful to V. I. Veksler and B. M. Pontecorvo for interest in the work and for numer-

L 19639-63
ACCESSION NR: AP3007064

4

ous discussions, as well as to E. L. Andronikashvili and V. P. Dzheleopov for interest and collaboration." Orig. art. has: 1 figure, 2 formulas, and 2 tables.

ASSOCIATION: Ob"yedinenny*y institut yaderny*kh issledovaniy (Joint Institute of Nuclear Research); Institut fiziki Akademii nauk Gruzinskoy SSR (Physics Institute, Academy of Sciences, Georgian SSR)

SUBMITTED: 02Apr63 DATE ACQ: 08Oct63 ENCL: 00

SUB CODE: PH NO REF SOV: 002 OTHER: 003

Card 3/3

ANIKINA, M.Kh.; ZHURAVLEVA, M.S.; KOTLYAREVSKIY, D.M.; MANDZHAVIDZE, Z.Sh.; MESTVIRISHVILI, A.N.; NYAGU, D.V.; OKONOV, E.O.; PETROV, N.I.; RUSAKOV, V.A.; TAKHTAMYSHEV, G.G.; CHKHAIDZE, L.V.; U TSZUN-FAN' [Wu TSung-fan]

Estimation of the relative probability of $K_2^o \rightarrow 3\pi^o$ decay. Zhur. eksper. i teor. fiz. 46 no.1:59-66 Ja '64. (MIRA 17:2)

1. Ob"yedinennyy institut yadernykh issledovaniy i Institut fiziki AN Gruzinskoy SSR.

GOGITIDZE, O.A.; MANDZHAVIDZE, Z.Sh.; RUSISHVILI, N.S.; TSERELOV, A.A.; SHTAYERMAN, A.Yu.

A 340-liter expansion-condensing chamber for studying high-energy particle interaction. Fiz. chast. vys. energ. no.1:91-96 '65. (MIRA 18:12)

[illegible] (M[illegible], [illegible]), MATEYES[illegible], [illegible] (Mateescu, [illegible]); [illegible] TO[illegible], [illegible] F.

Contribution [illegible] Green func[illegible]. Rev math [illegible] [illegible].

[illegible] 2. Faculty of Mathematics [illegible], [illegible] of Bucharest (for Mateescu). 3. Academy of [illegible] (for [illegible]). Submitted [illegible].

USSR / Human and Animal Physiology. Digestion, Intestine. T

Abs Jour : Ref Zhur - Biol., No 15, 1958, No. 70293

Author : Kikmadze, V. S.; ~~Mandzhgadze, B.;~~ Dolidze, F. P.; Onikashvili, M. G.

Inst : Scientific Research Institute of Blood Transfusion, GSSR

Title : The Influence of Blood Transfusion and Blood Loss on the Secretory Function of the Small Intestine

Orig Pub : Sb. tr. N.-i. in-t perelivaniya krovi, Georgian SSR, 1957, Vol 5, 98-111

Abstract : In dogs with fistulae of the small intestine of the Thierry-Vella type, transfusions of homologous blood in normal conditions produced, within the first six hours, inhibition of secretion, and within the following day, an increase in secretion. With acute moderate blood loss, especially in the presence of anemia following blood-letting, the intestinal secretion diminished. Blood

Card 1/2

USSR / Human and Animal Physiology. Digestion, Intestine. T

Abs Jour : Ref Zhur - Biol., No 15, 1958, No. 70293

transfusion in the presence of anemia only weakly inhibited secretion in the first phase but greatly enhanced fermentative activity in the second phase. Blood transfusion stimulated the regulatory mechanisms of biologic processes in the organism.

Card 2/2

MANDZHGALADZE, R.N.; VASHAKIDZE, V.I.; MASKAROVA, S.S.; KAPANADZE, ...

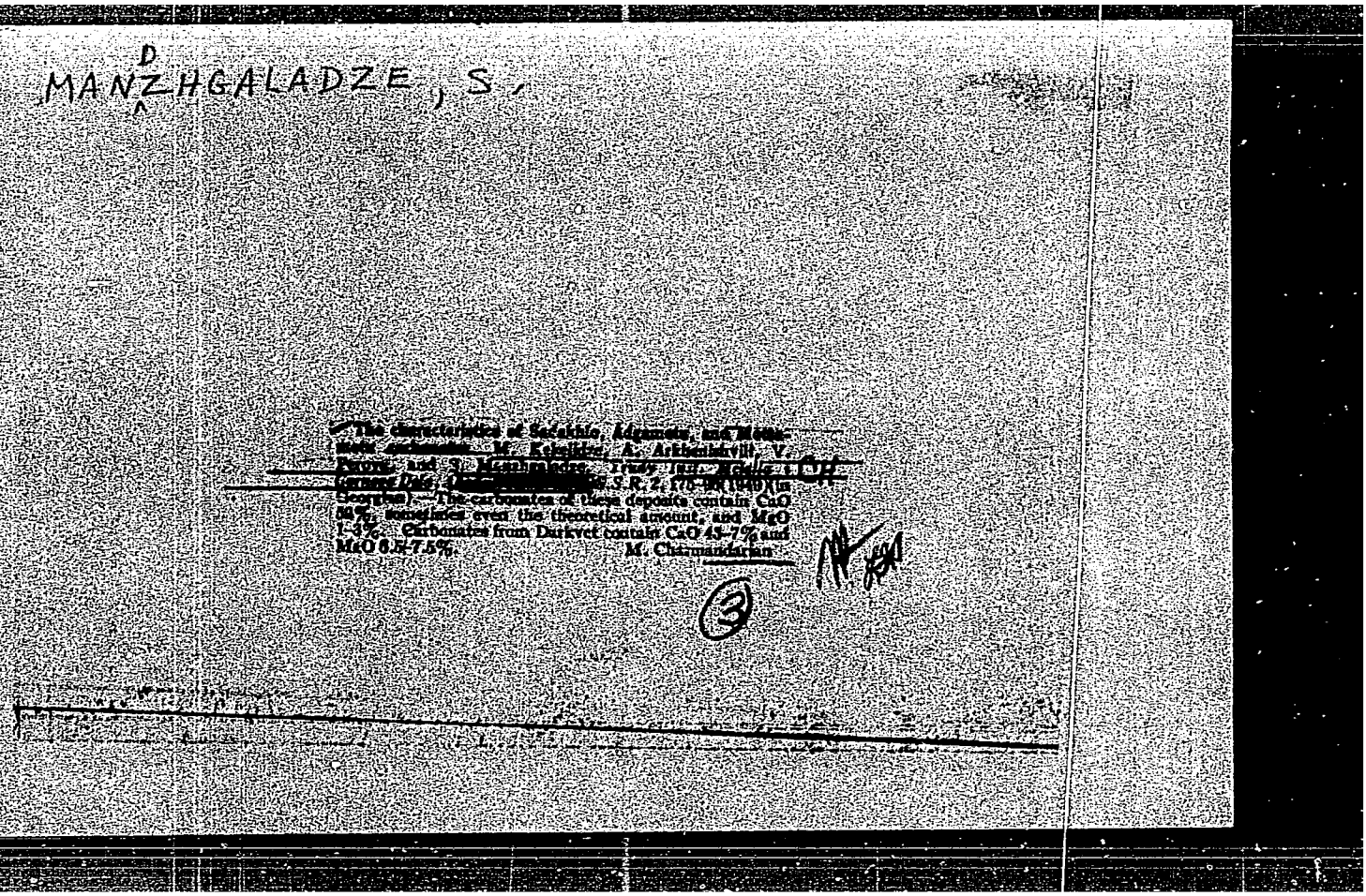
Some clinical and experimental data on the toxic properties of potassium permanganate. Soob. AN Gruz. SSR 36 no.3:[illegible] 1964. MIRA 18:3

1. Institut gigiyeny truda i professional'nykh zabolevaniy im. P.G. Makhviladze Ministerstva zdravookhraneniya Gruz. SSR. Submitted May 29, 1964.

MANDZHGALADZE, R.N.

Some problems of gonadotropic and embryotropic effect of manganese compounds. Soob. AN Gruz. SSR 38 no.1:221-226 Ap '65. (MIRA 18:12)

1. Institut gigiyeny truda i professional'nykh zabolevaniy imeni Makhviladze, Tbilisi. Submitted Oct. 12, 1964.



MANDZHGALADZE, S. M.

"An Investigation of the Corrosion Resistance of Metals in the Tbilisi Hot Springs." Cand Tech Sci, Georgian Polytechnic Inst imeni S. M. Kirov, Min Higher Education USSR, Tbilisi, 1955. (KL, No 12, Mar 55)

SO: Sum. No. 670, 29 Sep 55-Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

MANDZHGALADZE, S. N.

USSR/Corrosion - Protection From Corrosion. J.

Abs Jour : Referat Zhur - Khimiya, No 9, 1957, 33-51

Author : Tavadze, F.N., Mandzhgaladze, S.N.

Inst : Institute of Metals and Mining, Academy of Sciences Georgian SSR

Title : Determination of Irreversible Electrode Potentials of Metals in Tbilisi Mineral Waters.

Orig Pub : Tr. In-ta metalla i gorn. dela. AN GurzSSR, 1956, 7, 195-213

Abstract : A determination was made of the irreversible electrode potentials (IEP) of 14 metals in Tbilisi mineral waters of 2 drilled wells the composition of which includes up to 0.544 g/liter salts, N_2, CH_4, CO_2, H_2S. On the basis of the nature of the potential versus time curves the metals are subdivided in 3 groups:

Card 1/2

USSR/Corrosion - Protection From Corrosion. J.

Abs Jour : Ref Zhur - Khimiya, No 9, 1957, 33151

1) Fe, Cu, brass, IX13 steel, Zn -- acquire more negative potentials, 2) IX18N9T and EI533 steel, crude iron grey cast and sheet -- the potentials undergo almost no change with time; 3) Sn, Al, AMTs alloy -- acquire more positive potentials. IEP depended on composition of mineral water and the conditions of determination, in flowing water the IEP are more negative. Concerning the nature of IEP the assumption is made that Fe, stainless steels, Pb, Sn, Al, AMTs alloy, constituted, under the conditions of the experiment, complex electrodes of the film-pore type; Zn -- crude iron -- electrodes of the type metal-admixture of metal. The low value of the potential of Cu is attributed to formation of electrode of second kind -- Cu/CuS. Data are presented concerning the stability to corrosion of the investigated metals, after remaining for 6 months in the water of the above-stated wells.

Card 2/2

MANDZHGALADZE, S N.

USSR/Corrosion - Protection From Corrosion. J.

Abs Jour : Referat Zhur - Khimiya, No 9, 1957, 33154

Author : Tavadze, F.N., Mandzhgaladze, S.N.

Inst : Institute of Metals and Mining, Academy of Sciences Georgian SSR

Title : Study of Polarisation of Metals in Tbilisi Mineral Waters

Orig Pub : Tr. In-ta metalla i gorn. dela AN GruzSSR, 1956, 7, 215-227

Abstract : Curves were recorded of anodic and cathodic polarization of 14 technical metals: S-3 steel, cast grey crude iron, crude sheet iron, stainless steels of brands IX13, 1Kh18N9T, EI533, M3 Cu, L68 brass, Al, of alloy AMTs1, ZnTs2, NiHI, PbC2, SnO2 in the mineral waters of 2 Trilisi springs (No 6 and No 7) having slightly different saline composition (0.458-0.544 g/liter) and containing H_2S, CO_2, and Cl-ions. Temperature of the springs 27-42°, pH value

Card 1/2

USSR/Corrosion - Protection From Corrosion. J.

Abs Jour : Ref Zhur - Khimiya, No 9, 1957, 33154

7.2-8.2. The investigated metals, with a few exceptions showed slight anodic polarization. The cathodic process occurs more readily in the mineral water of spring No 6, having a somewhat higher content of H_2S, CO_2 and Cl-ions. In the opinion of the authors the corrosion of most of the investigated metals in the mineral waters of spring No 6 and No 7 takes place under cathodic limitation by the stage of O_2 ionization.

Card 2/2

2

21726

S/123/61/000/003/002/023
A004/A104

18.1150 1416

AUTHORS: Tavadze, F. N.; Tskitishvili, M. D.; Doliashvili, K. A.; Mandzhgaladze, S. N.; Gvaliya, T. M., and Nabichvrishvili, M. L.

TITLE: Effect of carbon and silicon on the heat resistance and scale resistance of alloys of the iron-chrome-manganese system

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 3, 1961, 17, abstract 3A114. ("Dokl. Nauchno-proizv. konferentsii mashinostroiteley i priborostroiteley". Leningrad, Sudpromgiz, 1959, 169-180)

TEXT: The authors investigated by the centrifugal method changes in the heat resistance of two series of Fe-Cr-Mn-alloys (15% Mn; 15 and 15% Cr) at 700 and 750°C under stresses of 5 - 15 kg/mm^2 during 250 - 500 hours depending on the C-content (0.5 - 4%) and Si-content (0.? - 7.0%). The tests were carried out with cast and heat-treated specimens. In a stabilized condition an increase in the C- and Si-contents reduces the heat resistance. The alloys resist oxidation up to 750°C.

E. Gini

[Abstractor's note: Complete translation]

Card 1/1

TAVADZE, F.N.; MANDZHGALADZE, S.N.

Complex effect of carbon and silicon on the corrosion of iron-chromium-manganese alloys. Trudy Inst. met. AN Gruz. SSR 10:53-68 '60. (MIRA 13:12)

(Iron-chromium-manganese alloys--Corrosion)

18.1235
18.1275

39508
S/123/62/000/014/002/020
A004/A101

AUTHORS: Tavadze, F. N., Mandzhgaladze, S. N., Tskitishvili, M. D., Dashniani, T. S., Lorakipanidze, I. N.

TITLE: The effect of small niobium, molybdenum, tungsten, titanium and aluminum additions on the corrosion resistance of chrome-manganese alloys

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 14, 1962, 20, abstract 14A121 ("Tr. In-ta metallurgii. AN GruzSSR", 1961, v. 11, 177 - 190)

TEXT: The authors investigated the effect of additions of Nb (0 - 0.65 and 3.5%), Mo (0 - 0.31 and 1.25%), W (0 - 4.21%), Ti (0 - 0.67%) and Al (0 - 1.52 and 4.72%) on the corrosion of alloys of the Fe-Cr-Mn-C-Si system in 5% H_2SO_4 and NaCl solutions. They come to the conclusion that Nb, Ti and Al improve the corrosion resistance of Cr-Mn steels and cast iron. Mo (0.09 - 1.25%) improves the corrosion resistance of steel, but reduces that of cast iron with 15% Cr. W deteriorates the corrosion resistance of Cr-Mn cast iron in a 5% H_2SO_4 solution. A steel composition was found which is corrosion-resistant in a 5% H_2SO_4 solution

Card 1/2

S/123/62/000/014/002/020
A004/A101

The effect of small...

(0.8% C, 25.6% Cr, 17% Mn, 1.1% Si, 0.2 - 0.3% Mo). There are 14 references.

[Abstracter's note: Complete translation]

Card 2/2

TAVADZE, F.N.; MANDZHGALADZE, S.N.; ERISTAVI, D.I., red.; GIORGADZE, O.N., red. izd-va; DZHAPARIDZE, N.A., tekhn. red.

[Corrosion and the protection of metals in mineral waters of Georgia]Korroziia i zashchita metallov v mineral'nykh vodakh Gruzii. Tbilisi, Izd-vo Akad. nauk Gruzinskoi SSR. Pt.2. 1962. 270 p. (MIRA 15:12)

1. Chlen-korrespondent Akademii nauk Gruzinskoy SSR (for Eristavi).

(Corrosion and anticorrosives)
(Georgia--Mineral waters)

S/598/62/000/007/034/040
D217/D307

AUTHORS: Tavadze, F. N., Mandzhgaladze, S. N., Dashniani, T. S. and Lordkipanidze, I. N.

TITLE: Corrosion resistance of new titanium alloys in a number of industrial solutions

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Titan i yego splavy. no. 7, Moscow, 1962. Metallokhimiya i novyye splavy, 246-252

TEXT: The corrosion resistance of new Ti alloys AT3(AT3), AT4, AT6 and AT8 was tested under various industrial conditions at the Institut metallurgii AN GruzSSR (Institute of Metallurgy, AS GSSR) during the last few years. In this work, the authors extend corrosion testing of these alloys to solutions encountered in the food industry, beneficiation plant and to tartaric acid solutions. It was found that the alloys resist the following solutions associated with the food industry: sweet, dry and strong wines, canned

Card 1/2

Corrosion resistance of ...

solutions containing cooking salt as well as those free from it, and tea solutions with or without tannin. The corrosion resistance of these alloys to solutions similar in composition to flotation and hydrometallurgical electrolytes of the Tyrny-auzskiy beneficiation plant, is satisfactory. The above four alloys and the alloys $AT8_2$ and $AT6_2$ are resistant to industrial solutions of tartaric acid. Titanium alloys containing 3 - 4% Al possess the optimum resistance. Further increase in Al content reduces the corrosion resistance in purified solutions. Commercially pure Ti BT1 (VT1), whose mechanical properties are inferior to those of the alloys AT3 and AT4, is attacked twice as rapidly in the above media than these alloys. There are 2 figures and 5 tables.

Card 2/2

S/598/62/000/007/035/040
D217/D307

18.1215

AUTHORS: Tavadze, F. N., Mandzhgaladze, S. N., Lordkipanidze, I. N. and Dashniani, T. S.

TITLE: Corrosion of new high-strength titanium alloys in mineral acids

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Titan i yego splavy. no. 7, Moscow, 1962, Metallokhimiya i novyye splavy, 253-262

TEXT: The six-component α-titanium-base alloys AT3 (AT3), AT4, AT6, AT8, AT9 and AT10 were tested for their resistance to various mineral acids at various concentrations and temperatures. Besides, special tests were carried out in order to select alloys resistant to acids at their boiling points. Three specimens were suspended from hooks in a flask provided with a condenser. One of the test specimens was tested in the gaseous phase, the second in the liquid phase and the third in an intermediate position. A water-line formed on the latter between the boiling acid and its vapors. The

Card 1/ 2

specimens were then removed, cleaned and weighed, and the acid solutions containing the dissolved metal ions, chemically analyzed. It was found that at room temperature the alloys are completely resistant to HCl and HNO_3 at all concentrations, and to H_2SO_4 of up to 15% concentration. They also resist the action of aqua regia and 50% H_3PO_4 at that temperature. Their resistance to boiling HCl is comparable with that of the steel 4Kh18N9T (1Kh18N9T) and to boiling H_2SO_4 with that of Pb. They possess a better resistance to boiling HNO_3 than the above steel, but HF rapidly attacks them. The corrosion products of the above alloys consist essentially of Ti and Al, the quantity of the latter being proportional to its content in the alloy. Besides, small quantities of Si and Fe go into solution. Chromium changes to soluble corrosion products only in HCl. The above alloys can be recommended for the manufacture of plant for the chemical industry, designed for service in contact with various acids. There are 7 figures and 6 tables.

S/598/62/000/007/036/040
D217/D307

IP. 1285

AUTHORS: Tavadze, F. N., Mandzhgaladze, S. N., Dashniani, T. S. and Lordkipanidze, I. N.

TITLE: Corrosion of the titanium alloys AT3(AT3), AT4, AT6 and AT8 in waters of various compositions and in the atmosphere

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Titan i yego splavy. no. 7. Moscow, 1962. Metallokhimiya i novyye splavy, 263-273

TEXT: Tests were carried out in distilled and in tap water at 20, 100 and 170°C. The tests at 170°C corresponded to a pressure of approximately 10 atm, and hence they had to be carried out in an autoclave. Besides, Ti and its alloys, together with other metals, were subjected to field tests in mineral waters and their vapors. In order to study the kinetics of the electrode processes and to obtain data on the possibility of using these alloys in contact with other metals, the irreversible electrode potentials were mea-

Card 1/ 2

sured and polarization curves plotted. A series of corrosion tests of the Ti alloys under various atmospheric conditions was also carried out. It was found that AT3, AT4, AT6, $AT6_1$, AT8, $AT8_1$ and AT10 possess a good resistance to distilled water at room temperature, and to tap water at 100 and 170°C. The above alloys are resistant to mineral waters of the Borzhomskiy ore deposits in 5% NaCl solution. Their resistance to waters of various compositions is due to inhibition of the anode reactions. Titanium and its α-base alloys will be cathodic to all metals, except Ni and Ag, in 0.5 N NaCl solution, and will cause rapid destruction of the anodes. After 5000 hours' exposure to atmospheres containing H_2S, nitric oxides, SO_2, ammonia, carbonic acid and other gases, polished alloys retain their reflective properties. The corrosion resistance of AT3 and AT4 under most atmospheric conditions is superior to that of the other alloys, and they are recommended as a material for memorials and decorative articles designed for service in industrial atmospheres and under tropical conditions. There are 3 figures and 8 tables.

Card 2/2

TAVADZE, F.N.; SVANIDZE, Sh.G.; MANDZHGALADZE, S.N.

Effect of copper on the corrosion-resistance of chromium-manganese-silicon steel. Trudy Inst.met. AN Gruz. SSR 12:129-136 '62.
(MIRA 15:12)

(Chromium-manganese steel--Corrosion) (Copper)

TAVADZE, F.N.; MANDZHGALADZE, S.N.; NABICHVRISHVILI, M.A.; DASHNIANI, T.S.; LORDKIPANIDZE, I.N.

Chemical properties of cast iron in the system iron - chromium - nickel - silicon - carbon. Trudy Inst.met. AN Gruz. SSR 12:137-144 '62. (MIRA 15:12)
(Cast iron—Thermal properties) (Corrosion and anticorrosives)

ACCESSION NR: AT4007035 S/2598/63/000/010/0151/0153

AUTHOR: Tavadze, F. N.; Mandzhgaladze, S. N.; Lordkipanidze, I, N.; Dashniani, T. S.

TITLE: Corrosion resistance of titanium alloys to media used in the pharmaceutical industry

SOURCE: AN SSSR. Institut metallurgii. Titan i yego splavy*, no. 10, 1963. Issledovaniya titanovy*kh splavov, 151-153

TOPIC TAGS: titanium alloy, VT-1 titanium, OT-4 titanium alloy, OT-40 titanium alloy, AT-3 titanium alloy, AT-4 titanium alloy, AT-6 titanium alloy, AT-8 titanium alloy, titanium alloy corrosion

ABSTRACT: On the initiative of the Tbilisskiy khimiko-farmatsevticheskiy zavod Sovnarkhoza GSSR (Tiflis Chemo-Pharmaceutical Plant, Sovnarkhoza Georgian SSR), the authors studied the corrosion resistance of the Ti alloys VT-1, AT-3, AT-4, AT-6, AT-8, OT-4 and OT-40 in a number of plant extracts and infusions, tincture of iodine and aqueous solutions of tannic and gallic acid, in comparison with that of stainless steel 1Kh18N9T (E1533), Cu, tinned Cu and Ni. Of these media, tincture of iodine was found to be the most corrosive. The Ti alloys of the AT and OT class were distinguished by high corrosion resistance in all media. Thus, in tinc-

Card 1/2